

SUMMARY OF CLAIM AMENDMENTS

Claims 1-30 are pending prior to the amendments.

Claims 1 and 4-30 are being canceled without prejudice or disclaimer. Claim 2 is being amended. New claims 31-48 are being added.

After the amendments, claims 2, 3, and 31-48 will be pending.

CLAIM LIST

1. Canceled
2. (Currently amended) Method according to claim 1 31, characterized in that for transformation an antisense or sense construct with respect to one of the cDNAs encoding N-acetyl glucosaminyl transferase I from *Solanum tuberosum*, *Nicotiana tabacum* or *Arabidopsis thaliana* is used.
3. (Original) Method according to claim 2, characterized in that for transformation an antisense or sense construct with respect to one of the DNA sequences given in SEQ ID NO:1, 3 or 5 is used.
- 4.-30. Canceled
31. (New) A method for the production of glycoproteins displaying minimal, uniform GlcNac₂Man₅-residues, comprising cultivating a transgenic plant, parts of transgenic plants or transformed plant cells, and isolating the desired glycoprotein from the material cultivated, characterized in that the transgenic plant, parts of transgenic plants or transformed plant cells, respectively, is/are transformed with an antisense construct or a sense construct, comprising an antisense DNA or a sense DNA with respect to the DNA sequence for a gene or a cDNA for plant N-acetyl glucosaminyl transferase I or a part thereof, for elimination or reduction of the activity of said N-acetyl glucosaminyl transferase, wherein the antisense or sense construct optionally contains additional regulatory sequences for the transcription of the respective antisense or sense DNA.
32. (New) The method according to claim 31, characterized in that the transgenic plant used is additionally transformed with the gene encoding the desired glycoprotein.
33. (New) The method according to claim 2, characterized in that the transgenic plant used is additionally transformed with the gene encoding the desired glycoprotein.

34. (New) The method according to claim 3, characterized in that the transgenic plant used is additionally transformed with the gene encoding the desired glycoprotein.

35. (New) An isolated DNA, comprising a DNA molecule encoding a sequence or the complementary thereof, which is selected from the group consisting of:

SEQ ID NOs:1, 3 and 5;

a DNA sequence encoding the amino acid sequence of SEQ ID Nos:
2, 4 or 6;

a DNA sequence which hybridizes under stringent conditions to SEQ
ID NOs:1, 3 or 5, or the complementary thereof; and

a DNA sequence which hybridizes under stringent conditions to a
DNA sequence, or the complementary thereof, which encodes SEQ
ID NOs:2, 4 or 6.

36. (New) An isolated DNA which encodes a polypeptide having N-acetyl glucosaminyl transferase I activity and which hybridizes under stringent conditions to the DNA of claim 35.

37. (New) A DNA construct comprising the DNA of claim 35 in the sense or anti-sense orientation.

38. (New) A DNA construct comprising the DNA of claim 36 in the sense or anti-sense orientation.

39. (New) A microorganism transformed with the DNA construct of claim 37.

40. (New) A microorganism transformed with the DNA construct of claim 38.

41. (New) A protein encoded by the DNA of claim 35.

42. (New) A protein encoded by the DNA of claim 36.
43. (New) An antigen, characterized in that it comprises:
the amino acid sequence given in SEQ ID NO: 2, SEQ
ID NO: 4 or SEQ ID NO: 6, or
amino acids 74 to 446 of the amino acid sequence given in Fig. 2, or
an amino acid sequence derived from the amino acid
sequences given in SEQ ID NO: 2, 4 or 6 by substitution,
deletion, insertion and/or modification of individual amino
acids and/or smaller groups of amino acids,

with the proviso, that upon immunization of a host with the antigen, said
antigen raises an immunological reaction, including the production of
antibodies directed against the antigen.
44. (New) A monoclonal or polyclonal antibody, characterized in that it specifically
recognizes and binds at least one protein of claim 41.
45. (New) A monoclonal or polyclonal antibody, characterized in that it specifically
recognizes and binds at least one protein of claim 42.
46. (New) A monoclonal or polyclonal antibody, characterized in that it specifically
recognizes and binds at least one antigen of claim 43.
47. (New) A transgenic plant, transgenic seed, transgenic reproduction material, part of
a transgenic plant or transformed plant cell, obtainable by integration of one or more
antisense or sense DNA of claim 35 under the control of a promoter effective in plants, into
the genome of a plant, or by viral infection by means of a virus containing one or more
antisense or sense DNA of claim 35, for an extrachromosomal propagation and
transcription of the antisense construct(s) in the plant tissue infected.

48. (New) A transgenic plant, transgenic seed, transgenic reproduction material, part of a transgenic plant or transformed plant cell, obtainable by integration of one or more antisense or sense DNA of claim 36 under the control of a promoter effective in plants, into the genome of a plant, or by viral infection by means of a virus containing one or more antisense or sense DNA of claim 36, for an extrachromosomal propagation and transcription of the antisense construct(s) in the plant tissue infected.